

## HZ540 and HZ550 - Near Field Probe sets



Image:  
HZ550

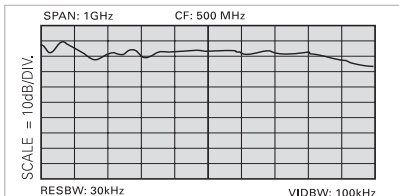
The HAMEG HZ540 and HZ550 are active close field probe sets designed for use as a diagnostic aid in the solution of emissions problems. The sets consist of three or five different handheld probes resp.. They feature different sensitivities and reception characteristics and can be used along with a variety of spectrum analyzers, EMI receivers or oscilloscopes.

The probes are designed to assist in providing quick identification of signal sources. It can be used to diagnose emissions from circuit boards, integrated circuits, PC board edge runs, ground plane currents, ribbon cables, corner seams and similar interference sources.

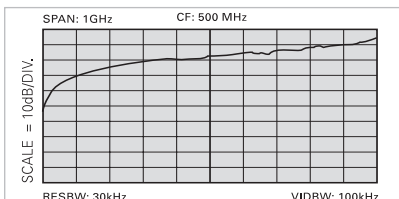
The sets include magnetic field probes as well as a probe for electric field signals. The probes cover a frequency range from 30 MHz to 3 GHz providing close field relative readings. The probes can be powered by HAMEG spectrum analysers directly or any 6 VDC source.

The H-field probes provide signals that are proportional to the magnetic field strength. This enables to localize interference sources with relatively high precision. The E-field probe is the most sensitive of the sets. It can be used to assess the total effect of shielding on a tested circuit. The high-impedance probe can be used to determine signals on contacts without degrading signal performance by the probe capacity.

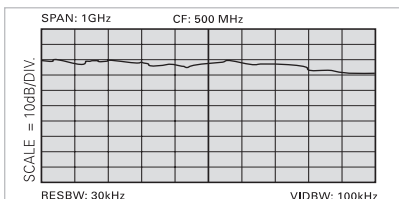
Typical frequency response, Electrical Field Probe



Typical frequency response Magnetic Field Probe



Typical frequency response High Impedance Probe



### Probe set HZ540 (Basic set)

HZ551	Electrical Field Probe
Frequency range:	< 1 MHz to approx. 3 GHz
Polarization:	omnidirectional Sensitive to electrical fields
Output impedance:	50 Ω; SMA-connector
Power supply:	6 VDC / 80 mA (directly by HAMEG Spectrum Analyzer)

HZ552	Magnetic Field Probe
Frequency range:	< 30 MHz to approx. 3 GHz
Polarization:	similar to frame antenna Sensitive to changing magnetic fields
Output impedance:	50 Ω; SMA-connector
Power supply:	6 VDC / 80 mA (directly by HAMEG Spectrum Analyzer)

HZ553	High Impedance Probe
Frequency range:	< 1 MHz to approx. 3 GHz
Input capacity:	< 2 pF    approx. 100 kΩ
Attenuation:	between 10:1 and 30:1
Max. input voltage:	10 V <sub>SS</sub> (without significant distortion)
Max. voltage of an uninsulated conductor:	30 V
Output impedance:	50 Ω; SMA-connector
Power supply:	6 VDC / 80 mA (directly by HAMEG Spectrum Analyzer)

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